

AMENDMENTS TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A multiple discharge-servo curve control method ~~of~~ for an electrical discharge machine, which comprises the steps of:
 - (1) ~~input constructing discharge-servo curves based by inputting gap-voltage deviation and its corresponded machine precession rate of the discharge-servo curvature to build cutting speed records obtained under different cutting conditions, and pre-storing the discharge-servo curves in a multiple discharge-servo curve database;~~
 - (2) ~~define the numerical value of the discharge-servo curve parameters, which is depended on the processing conditions and the required discharge-servo curve to define a numerical value for the discharge-servo curve~~ retrieving an initial one of said discharge-servo curves and performing a cutting procedure under control of a processing control program by referring to said initial one of said discharge-servo curves;
 - (3) ~~according to the numerical value of the discharge-servo curve parameters, access the corresponding discharge-servo curve data kept in the discharge-servo curve database and record it into the multiple discharge-servo curve controller~~ adding a discharge-servo curve instruction to said processing control program, said discharge-servo control instruction specifying an nth discharge-servo curve;
 - (4) ~~input the processing instruction and the discharge-servo curve instruction in order to setup the processing program when the processing control program detects said discharge-servo curve instruction, retrieving said nth discharge-servo curve from said database;~~
 - (5) ~~program node for judging the processing instruction, and the processing instruction will be executed by following the discharge-servo curve data that is stored insider the multiple discharge servo-curve-controller as soon as program node being a calling instruction; and then~~

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~~(6) program node for judging the discharge-servo curvature, the nth discharge-servo curve data will be accessed from the discharge-servo curve database and is then stored inside the multiple discharge-servo-curve-controller as program node being a "discharge machining NO.n" swapping said nth discharge-servo curve for said initial one of said discharge-servo curves and continuing said cutting procedure under control of the processing control program by referring to said nth discharge-servo curve.~~

2. (Currently Amended) A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content of as claimed in claim 1, wherein ~~the discharge-servo curve that is defined by the gap-voltage deviation and machine precession rate of the real discharge machining records of the~~ said different conditions involve different electrode material materials.

3. (Currently Amended) A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content of as claimed in claim 1, wherein ~~the discharge-servo curve that is defined by the gap-voltage deviation and machine precession rate of the real discharge machining records of the~~ said different conditions involve different work-piece material materials.

4. (Currently Amended) A multiple discharge-servo curve control method of electrical discharge machine, which comprises the content of as claimed in claim 1, wherein ~~the discharge-servo curve that is defined by the gap-voltage deviation and machine precession rate of the real discharge machining records of the~~ said different conditions involve different cutting solution material materials.

5. (Canceled)

6. (Canceled)

7. A multiple discharge-servo curve control device of electrical discharge machine, comprising:
- a storage unit, ~~which keeps the~~ arranged to pre-store discharge-servo curve data;
 - a setting unit, which sets the numerical value of discharge-servo curve parameter;
 - a reading unit connected to the storage unit, which ~~access~~ retrieves the pre-stored discharge-servo curve data from the storage unit in according with the numerical value of discharge-servo curve parameter defined in the setting unit;
 - a program unit, which ~~provides the processing instruction of the machining program, the editing of the discharge-servo curve instruction and the initiation of the machining program, moreover it executes the~~ executes a machining program to control work-piece machining with ~~the~~ based on a first set of discharge-servo curve data; and
 - an instruction-judging unit connected to the program unit and the reading unit, which ~~judge the machining program node to be the processing instruction or the~~ the instruction-judging unit being arranged to detect a discharge-servo curve instruction in the machining program, obeying the discharge-servo curve instruction edited by the program unit, the processing program will call the retrieve designated discharge-servo curve instruction data, and swap the retrieved discharge-servo curve data for the first set of discharge-servo curve data to match the real machining needs; ~~swap the discharge-servo curve information and upgrade to the one-step machining with selectable multiple discharge-servo curves.~~